

9. Acronyms and Abbreviations

AASE	Airborne Arctic Stratospheric Expedition
ACATS	Airborne Chromatograph for Atmospheric Trace Species
AEC	Atomic Energy Commission
AGASP	Arctic Gas and Aerosol Sampling Program
AL	Aeronomy Laboratory, Boulder, Colorado (ERL)
ALE/GAGE	Atmospheric Lifetime Experiment/Global Atmospheric Gases Experiment
ALIAS	aircraft laser infrared absorption spectrometer
ALT	Alert, Northwest Territories, Canada
ANSTO	Australian Nuclear Science and Technology Organization
AOML	Atlantic Oceanographic and Meteorological Laboratory, Miami, Florida (ERL)
ARL	Air Resources Laboratory, Silver Spring, Maryland (ERL)
ARM	Atmospheric Radiation Measurement program
ASA	Antarctic Support Associates, Inc.
ASASP	Active Scattering Aerosol Spectrometer Probe
ASHOE	Airborne Southern Hemisphere Ozone Experiment
ASL	above sea level
ASR	aerosol solar radiation
ATLAS	airborne turnable laser absorption spectrometer
ATMOS	Atmospheric Trace Molecule Spectroscopy
BAO	Boulder Atmospheric Observatory
BC	black carbon
BSRN	Baseline Surface Radiation Network
BRW	Barrow Observatory, Barrow, Alaska (CMDL)
CAF	Clean Air Facility
CAMS	Control and Monitoring System
CART	Cloud And Radiation Testbed
CD-ROM	compact disk-read only memory
CFC	chlorofluorcarbon
CFC-11	trichlorofluoromethane
CFC-12	dichlorodifluoromethane
CGO	Cape Grim, Tasmania, baseline station
CIRES	Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder
CMDL	Climate Monitoring and Diagnostics Laboratory (ERL)
CN	condensation nuclei
CNC	condensation nucleus counter
CSIRO/DAR	Commonwealth Scientific and Industrial Research Organization/Division of Atmospheric Research, Australia
CSU	Colorado State University, Fort Collins, Colorado
DAS	data acquisition system
DB	direct-beam [irradiance]
DEW	distant early warning
DMS	dimethyl sulfide
DOE	Department of Energy
DOY	day of year
DU	Dobson units
ECC	electrochemical concentration cell
ECD	electron capture detector
EC-GC	electron capture-gas chromatograph
ECMWF	European Center for Medium-Range Weather Forecasts
EML	Environmental Measurements Laboratory
ENSO	El Niño/Southern Oscillation
ERL	Environmental Research Laboratories, Boulder, Colorado (NOAA)

FID	flame ionization detector
FPD	flame photometric detector
FTIR	Fourier transform infrared (spectroscopy)
FTS	File Transfer System
FW	filter wheel
GAGE	Global Atmospheric Gases Experiment
GAW	Global Atmosphere Watch
GC	gas chromatograph
GE	General Electric
GMT	Greenwich Mean Time
GOES	Geostationary Operational Environmental Satellite
GSA	General Services Administration
HAO	High Altitude Observatory
HCFC	hydrochlorofluorocarbon
HCFC-22	CHClF ₂
HCFC-141b	CH ₃ CCl ₂ F
HCFC-142b	CH ₃ CClF ₂
H-1211	CBrClF ₂
H-1301	CBrF ₃
HFC	hydrofluorocarbon
HP	Hewlett-Packard
HST	Hawaii standard time
INSTAAR	Institute for Arctic and Alpine Research, University of Colorado, Boulder
IR	infrared
ISWS	Illinois State Water Survey
JPL	Jet Propulsion Laboratories
KUM	Cape Kumukahi, Hawaii
LAN	local area network
LEADEX	Leads Experiment
LEAPS	Low Electron Attachment Potential Species
LES	Lincoln Experimental Satellite
LLNL	Lawrence Livermore National Laboratories
LOWESS	Locally Weighted Least Squares
LPM	liters per minute
LST	local standard time
MAKS	Martin and Kitzis Sampler (portable air sampler)
MAESA	Measurements for Assessing the Effects of Stratospheric Aircraft
METOP	Meteorological Operational Mission (polar satellite series)
MLO	Mauna Loa Observatory, Hawaii (CMDL)
MLOPEX	MLO Photochemical Experiment
MOA	Memorandum of Agreement
MRI	Meteorology Research, Inc.
MS	mass spectrometer
MSL	mean sea level
NADP	National Atmospheric Deposition Program
NASA	National Aeronautics and Space Administration
NAVSWC	Naval Surface Warfare Center, Department of Defense
NCAR	National Center for Atmospheric Research
NDSC	Network for the Detection of Stratospheric Change
NDIR	non-dispersive infrared analyzer
NIP	normal incidence pyrheliometer
NOAA	National Oceanic and Atmospheric Administration (U.S. Department. of Commerce)
NOAH	Nitrous Oxide And Halocarbons Division (CMDL)
NSF	National Science Foundation

NWR	Niwot Ridge, Colorado
NWS	National Weather Service
NOS	National Ocean Service
o.d.	outside diameter
OGIST	Oregon Graduate Institute of Science and Technology
OH	hydroxyl radical
ONR	Office of Naval Research
PBL	planetary boundary layer
PC	personal computer
PI	Principal investigator
PMEL	Pacific Marine Environmental Laboratory (ERL)
PMOD	Physikalisch-Meteorologisches Observatorium Davos (World Radiation Center)
PSP	Precision Spectral Pyranometer
QBO	quasi-biennial oscillation
RASS	Radio Acoustic Sounding System
RITS	Radiatively Important Trace Species
RGA	reduction gas analyzer
RSD	residual standard deviation
RV	Recreational vehicle
SBUV	solar backscattered ultraviolet (satellite ozone instrument)
SCS	Soil Conservation Service, Anchorage, Alaska
s.d.	standard deviation
SESAME	Second European Stratospheric Arctic Middle Latitude Experiment
SEASPAN	SEAREX South Pacific Aerosol Network
SIO	Scripps Institution of Oceanography
SMO	Samoa Observatory, American Samoa (CMDL)
SOI	Southern Oscillation Index
SPADE	Stratospheric Photochemistry, Aerosols, and Dynamics Expedition
SPO	South Pole Observatory, Antarctica (CMDL)
SRB	surface radiation budget
SRF	Solar Radiation Facility (CMDL)
SRF	spectral response function
SST	sea-surface temperature
STP	standard temperature and pressure (0° and 1 atm)
TDLS	tunable diode laser spectroscopy
TOMS	Total Ozone Mapping Spectrometer
TSI	Thermo Systems Incorporated
TSL	Technical Services Laboratory
UARS	Upper Atmosphere Research Satellite
UCI	University of California, Irvine
UPS	uninterruptable power supply
URAS	[a commercial CO ₂ analyzer]
URI	University of Rhode Island
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UT	universal time
UV	ultraviolet
UVB	ultraviolet B spectral band
VMS	Virtual Memory System
WD	wind direction
WS	wind speed
WOCE	World Ocean Circulation Experiment
WHOI	Woods Hole Oceanographic Institute
WMO	World Meteorological Organization